

Paper Reference 31761H

Pearson BTEC Level 3

Nationals Certificate, Extended

Certificate, Foundation Diploma, Diploma,

Extended Diploma

INFORMATION TECHNOLOGY

UNIT 2: CREATING SYSTEMS TO

MANAGE INFORMATION (PART B)

Friday 17 January 2020 – Morning

Time: 2 hours (plus your additional time allowance)

YOU MUST HAVE:

- **activity6.rtf**
- **activity7.rtf**
- **partB_database.accdb or**
- **partB_database.mdb**

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ITEMS INCLUDED WITH QUESTION PAPER

- **Instructions to Invigilators.**
- **Instructions for Learners.**
- **Part B Set Task Brief.**

INSTRUCTIONS

- **Part A and Part B contain the material for the completion of the set tasks under supervised conditions.**
- **There are 40 marks for Part A and 26 marks for Part B, giving a total mark for the set tasks of 66.**
- **Part A and Part B are specific to each series and this material must be issued only to learners who have been entered to take the tasks in the specified series.**
- **Learners MUST ONLY have access to Part B during this examination session.**
- **This booklet should be kept securely until the start of the 2 – hour supervised assessment period.**
- **Part A materials MUST NOT be accessed during the completion of Part B.**
- **Part A and Part B should be submitted together for each learner.**

- **This booklet should not be returned to Pearson.**
- **Answer ALL activities.**

INFORMATION

- **The total mark for this paper is 26.**
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Part B SET TASK

YOU MUST COMPLETE ALL ACTIVITIES WITHIN THE SET TASK.

PRODUCE YOUR DOCUMENTS USING A COMPUTER.

**SAVE YOUR DOCUMENTS IN YOUR FOLDER
READY FOR SUBMISSION USING THE FORMATS
AND NAMING CONVENTIONS INDICATED.**

Activity 6 is on the next page.

ACTIVITY 6: FORMS – You are advised to spend 1 hour and 10 minutes (plus your additional time allowance) on this activity.

NOTE

- The structure of the tables provided should not be changed in any way, e.g. do not add validation, do not change data types.
- You will **ONLY** be required to use **tblStaff** and **tblJobRole**.

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(a) Create an efficient interface that will facilitate database input by producing:

- (i) an input form to add a member of staff.**
- **The form should be ready for data entry.**
 - **The staff member's surname must be present.**
 - **The user should be able to select the staff member's job role.**
 - **The user should be able to select the staff member's availability.**
 - **Valid data should be appended to the staff table and a save message should display.**
 - **A suitable error message should appear where invalid data has been used.**

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- (ii) an input form to check staff availability.
- The form should NOT include validation for any fields.
 - The form should NOT include an automated routine to save the data.
 - The user should be able to select the job role.
 - The user should be able to select either Friday or Saturday as the day they want to check availability for.
 - After the job role and day have been selected the form must display:
 - a list of the names of staff members who are available
 - the total number of staff available for the job role and day.

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Evidence your interface as screenprints using the given **activity6.rtf** template.

Your screenprints must show:

- the **DESIGN** view and **FORM** view of all the forms you have created
- the **DESIGN** view of any queries you have created and used with the forms including fields and criteria
- the **DATASHEET** view of any queries you have created and used with the forms
- details of any calculations, validation and macros/code you have created and used with the forms.

Ensure sufficient information is provided to allow a competent third party to maintain the database.

Save the evidence of your interface as a PDF in your folder for submission as

activity6_[Registration number #]_[surname]_[first letter of first name]

(TOTAL FOR ACTIVITY 6 = 14 MARKS)

ACTIVITY 7: INTERFACE TESTING – You are advised to spend 20 minutes (plus your additional time allowance) on this activity.

Test the interface of your relational database using appropriate test data (normal, erroneous and extreme as appropriate).

You must provide evidence of FORM LEVEL testing that proves:

- 1. the user cannot select an invalid job role on the input form that adds a member of staff**
- 2. the user cannot select invalid availability on the input form that adds a member of staff**
- 3. a record will not save in the staff table without a staff member's forename**
- 4. a record will save in the staff table if the staff member's details are present and valid**
- 5. the correct list of staff members displays when the job role is 'Bartender' and the availability is 'Friday'**
- 6. the correct total number of staff displays when the job role is 'Steward' and the availability is 'Saturday'.**

Turn over

Complete the test log to show how you have tested your input forms using the given **activity7.rtf** template.

Save your test log as a PDF in your folder for submission as

activity7_[Registration number #]_[surname]_[first letter of first name]

(TOTAL FOR ACTIVITY 7 = 6 MARKS)

Activity 8 is on the next page.

ACTIVITY 8: INTERFACE EVALUATION – You are advised to spend 20 minutes (plus your additional time allowance) on this activity.

Evaluate your interface.

You should consider

- **the quality, performance and usability of the interface you have created in terms of how well it ensures:**
 - **the user cannot select an invalid job role**
 - **the user cannot select invalid availability**
 - **a record will not save in the staff table without a staff member's forename**
 - **a record will save in the staff table if the staff member's details are present and valid**
 - **the correct list of staff members displays when the job role is 'Bartender' and the availability is 'Friday'**
 - **the correct total number of staff displays when the job is 'Steward' and the availability is 'Saturday'.**

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Turn over

Save your evaluation as a PDF in your folder for submission as

activity8_[Registration number #]_[surname]_[first letter of first name]

(TOTAL FOR ACTIVITY 8 = 6 MARKS)

TOTAL FOR PART B = 26 MARKS
